DOCUMENT RESUME

ED 378 563 CS 011 983

AUTHOR Sweet, Anne P.; Guthrie, John T.
TITLE Teacher Perceptions of Students' Motivation To Read. Reading Research Report No. 29.
INSTITUTION National Reading Research Center, Athens, GA.; National Reading Research Center, College Park, MD.
SPONS AGENCY Office of Educational Research and Improvement (ED), Washington, DC.
PUB DATE 94
CONTRACT 117A20007
NOTE 42p.
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Academic Achievement; Elementary Education; Grade 3; Grade 5; Questionnaires; *Reading Achievement; Reading Research; Sex Differences; *Student Motivation; *Teacher Attitudes; *Teacher Expectations of Students
IDENTIFIERS Focus Groups; *Reading Motivation

ABSTRACT

An exploratory study examined teachers' perceptions of students' motivation to read and the relationship between those perceptions and students' reading achievement. Focus groups of third- and fifth-grade teachers were convened and given an initial questionnaire. A second questionnaire based on those findings was developed and field-tested with third- and fifth-grade teachers and students. Questionnaire items clustered conceptually into five categories: involvement, strategies in reading, social, written expression, and persistence. This interwoven series of conceptually cohesive item groupings supported the notion that teachers possess a highly integrated construct of students' motivation to read. Data on students' achievement were also collected and analyzed. For students in grade 5, those perceived by teachers to be highly motivated to read also had high report-card grades in reading and social studies, and students perceived by teachers to be low in motivation to read had low report-card grades in reading and social studies. Across grades 3 and 5, the pattern was stronger: those students perceived by teachers to be highly motivated to read also had high report-card grades in all school subjects; conversely, students perceived by teachers to be unmotivated to read had low report-card grades in all school subjects. No gender differences in students' perceived level of reading motivation or level of achievement were found. (Contains 31 references and 6 tables of data. Appendixes present the initial and revised questionnaires, and data on response choices to the initial questionnaire.) (RS)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 378 563

Teacher Perceptions of Students' Motivation to Read

Anne P. Sweet
U.S. Department of Education
Washington, DC

John T. Guthrie
University of Maryland College Park

CS011583

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

NRRC National Reading Research Center

READING RESEARCH REPORT NO. 29
Fall 1994

BEST COPY AVAILABLE

NRRC

National Reading Research Center

Teacher Perceptions of Students' Motivation to Read

Anne P. Sweet
U.S. Department of Education
Washington, DC

John T. Guthrie
University of Maryland College Park

READING RESEARCH REPORT NO. 29
Fall 1994

The work reported herein is a National Reading Research Project of the University of Georgia and University of Maryland. It was supported under the Educational Research and Development Centers Program (PR/AWARD NO. 117A20007) as administered by the Office of Educational Research and Improvement, U.S. Department of Education. The findings and opinions expressed here do not necessarily reflect the position or policies of the National Reading Research Center, the Office of Educational Research and Improvement, or the U.S. Department of Education.

NRRC National Reading Research Center

Executive Committee
Donna E. Alvermann, Co-Director
University of Georgia
John T. Guthrie, Co-Director
University of Maryland College Park
James F. Baumann, Associate Director
University of Georgia
Patricia S. Koskinen, Associate Director
University of Maryland College Park
Nancy B. Mizelle, Acting Associate Director
University of Georgia
Jamie Lynn Metsala, Interim Associate Director
University of Maryland College Park
Penny Oldfather
University of Georgia
John F. O'Flahavan
University of Maryland College Park
James V. Hoffman
University of Texas at Austin
Cynthia R. Hynd
University of Georgia
Robert Serpell
University of Maryland Baltimore County
Betty Shockley
Clarke County School District, Athens, Georgia
Linda DeGroff
University of Georgia

Publications Editors

Research Reports and Perspectives
Linda DeGroff, Editor
University of Georgia
James V. Hoffman, Associate Editor
University of Texas at Austin
Mariam Jean Dreher, Associate Editor
University of Maryland College Park
Instructional Resources
Lee Galda, *University of Georgia*
Research Highlights
William G. Holliday
University of Maryland College Park
Policy Briefs
James V. Hoffman
University of Texas at Austin
Videos
Shawn M. Glynn, *University of Georgia*

NRRC Staff
Barbara F. Howard, Office Manager
Kathy B. Davis, Senior Secretary
University of Georgia

Barbara A. Neitzey, Administrative Assistant
Valerie Tyra, Accountant
University of Maryland College Park

National Advisory Board
Phyllis W. Aldrich
Saratoga Warren Board of Cooperative Educational Services, Saratoga Springs, New York
Arthur N. Applebee
State University of New York, Albany
Ronald S. Brandt
Association for Supervision and Curriculum Development
Marshá T. DeLain
Delaware Department of Public Instruction
Carl A. Grant
University of Wisconsin-Madison
Walter Kintsch
University of Colorado at Boulder
Robert L. Linn
University of Colorado at Boulder
Luis C. Moll
University of Arizona
Carol M. Santa
School District No. 5
Kalispell, Montana
Anne P. Sweet
Office of Educational Research and Improvement, U.S. Department of Education
Louise Cherry Wilkinson
Rutgers University

Production Editor
Katherine P. Hutchison
University of Georgia

Dissemination Coordinator
Jordana E. Rich
University of Georgia

Text Formatter
Ann Marie Vanstone
University of Georgia

NRRC - University of Georgia
318 Aderhold
University of Georgia
Athens, Georgia 30602-7125
(706) 542-3674 Fax: (706) 542-3678
INTERNET: NRRC@uga.cc.uga.edu

NRRC - University of Maryland College Park
2102 J. M. Patterson Building
University of Maryland
College Park, Maryland 20742
(301) 405-8035 Fax: (301) 314-9625
INTERNET: NRRC@umail.umd.edu

About the National Reading Research Center

The National Reading Research Center (NRRC) is funded by the Office of Educational Research and Improvement of the U.S. Department of Education to conduct research on reading and reading instruction. The NRRC is operated by a consortium of the University of Georgia and the University of Maryland College Park in collaboration with researchers at several institutions nationwide.

The NRRC's mission is to discover and document those conditions in homes, schools, and communities that encourage children to become skilled, enthusiastic, lifelong readers. NRRC researchers are committed to advancing the development of instructional programs sensitive to the cognitive, sociocultural, and motivational factors that affect children's success in reading. NRRC researchers from a variety of disciplines conduct studies with teachers and students from widely diverse cultural and socioeconomic backgrounds in pre-kindergarten through grade 12 classrooms. Research projects deal with the influence of family and family-school interactions on the development of literacy; the interaction of sociocultural factors and motivation to read; the impact of literature-based reading programs on reading achievement; the effects of reading strategies instruction on comprehension and critical thinking in literature, science, and history; the influence of innovative group participation structures on motivation and learning; the potential of computer technology to enhance literacy; and the development of methods and standards for alternative literacy assessments.

The NRRC is further committed to the participation of teachers as full partners in its research. A better understanding of how teachers view the development of literacy, how they use knowledge from research, and how they approach change in the classroom is crucial to improving instruction. To further this understanding, the NRRC conducts school-based research in which teachers explore their own philosophical and pedagogical orientations and trace their professional growth.

Dissemination is an important feature of NRRC activities. Information on NRRC research appears in several formats. *Research Reports* communicate the results of original research or synthesize the findings of several lines of inquiry. They are written primarily for researchers studying various areas of reading and reading instruction. The *Perspective Series* presents a wide range of publications, from calls for research and commentary on research and practice to first-person accounts of experiences in schools. *Instructional Resources* include curriculum materials, instructional guides, and materials for professional growth, designed primarily for teachers.

For more information about the NRRC's research projects and other activities, or to have your name added to the mailing list, please contact:

Donna E. Alvermann, Co-Director
National Reading Research Center
318 Aderhold Hall
University of Georgia
Athens, GA 30602-7125
(706) 542-3674

John T. Guthrie, Co-Director
National Reading Research Center
2102 J. M. Patterson Building
University of Maryland
College Park, MD 20742
(301) 405-8035

NRRC Editorial Review Board

Patricia Adkins
University of Georgia

Peter Afflerbach
University of Maryland College Park

JoBeth Allen
University of Georgia

Patty Anders
University of Arizona

Tom Anderson
University of Illinois at Urbana-Champaign

Harriette Arrington
University of Kentucky

Irene Blum
Pine Springs Elementary School
Falls Church, Virginia

John Borkowski
Notre Dame University

Cynthia Bowen
Baltimore County Public Schools
Towson, Maryland

Martha Carr
University of Georgia

Suzanne Clewell
Montgomery County Public Schools
Rockville, Maryland

Joan Coley
Western Maryland College

Michelle Commeyras
University of Georgia

Linda Cooper
Shaker Heights City Schools
Shaker Heights, Ohio

Karen Costello
Connecticut Department of Education
Hartford, Connecticut

Karin Dahl
Ohio State University

Lynne Diaz-Rico
California State University-San Bernardino

Pamela Dunston
Clemson University

Jim Flood
San Diego State University

Dana Fox
University of Arizona

Linda Gambrell
University of Maryland College Park

Valerie Garfield
Chattahoochee Elementary School
Cumming, Georgia

Sherrie Gibney-Sherman
Athens-Clarke County Schools
Athens, Georgia

Rachel Grant
University of Maryland College Park

Barbara Guzzetti
Arizona State University

Jane Haugh
Center for Developing Learning Potentials
Silver Spring, Maryland

Beth Ann Herrmann
Northern Arizona University

Kathleen Heubach
University of Georgia

Susan Hill
University of Maryland College Park

Sally Hudson-Ross
University of Georgia

Cynthia Hynd
University of Georgia

Robert Jimenez
University of Oregon

Karen Johnson
Pennsylvania State University

James King
University of South Florida

Sandra Kimbrell
West Hall Middle School
Oakwood, Georgia

Kate Kirby
Gwinnett County Public Schools
Lawrenceville, Georgia

Sophie Kowzun
Prince George's County Schools
Landover, Maryland

Linda Labbo
University of Georgia

Rosary Lalik
Virginia Polytechnic Institute

Michael Law
University of Georgia

Sarah McCarthey
University of Texas at Austin

Veda McClain
University of Georgia

Lisa McFalls
University of Georgia

Mike McKenna
Georgia Southern University

Donna Mealey
Louisiana State University

Barbara Michalove
Fowler Drive Elementary School
Athens, Georgia

Akintunde Morakinyo
University of Maryland College Park

Lesley Morrow
Rutgers University

Bruce Murray
University of Georgia

Susan Neuman
Temple University

Caroline Noyes
University of Georgia

John O'Flahavan
University of Maryland College Park

Penny Oldfather
University of Georgia

Joan Pagnucco
University of Georgia

Barbara Palmer
Mount Saint Mary's College

Mike Pickle
Georgia Southern University

Jessie Pollack
Maryland Department of Education
Baltimore, Maryland

Sally Porter
Blair High School
Silver Spring, Maryland

Michael Pressley
State University of New York at Albany

Tom Reeves
University of Georgia

Lenore Ringler
New York University

Mary Roe
University of Delaware

Nadeen T. Ruiz
California State University-Sacramento

Rebecca Sammons
University of Maryland College Park

Paula Schwanenflugel
University of Georgia

Robert Serpell
University of Maryland Baltimore County

Betty Shockley
Fowler Drive Elementary School
Athens, Georgia

Susan Sonnenschein
University of Maryland Baltimore County

Steve Stahl
University of Georgia

Anne Sweet
Office of Educational Research and Improvement

Liqing Tao
University of Georgia

Ruby Thompson
Clark Atlanta University

Louise Tomlinson
University of Georgia

Sandy Tumarkin
Strawberry Knolls Elementary School
Gaithersburg, Maryland

Sheila Valencia
University of Washington

Bruce VanSledright
University of Maryland College Park

Chris Walton
Northern Territory University
Australia

Janet Watkins
University of Georgia

Louise Waynant
Prince George's County Schools
Upper Marlboro, Maryland

Priscilla Waynant
Rolling Terrace Elementary School
Takoma Park, Maryland

Dera Weaver
Athens Academy
Athens, Georgia

Jane West
Agnes Scott

Steve White
University of Georgia

Allen Wigfield
University of Maryland College Park

Shelley Wong
University of Maryland College Park

About the Authors

Anne P. Sweet is Director of the Learning & Instruction Division, Office of Research, Office of Educational Research and Improvement. She is also federal monitor for the National Reading Research Center. Dr. Sweet may be contacted at the following office address: OERI, 555 New Jersey Avenue, NW, Washington, DC 20208. Telephone: (202) 219-2043.

John T. Guthrie is Co-Director of the National Reading Research Center and Professor of Human Development at the University of Maryland College Park. He may be contacted at the following office address: 3216 J. M. Patterson Building, University of Maryland College Park, College Park, MD 20742. Telephone: (301) 405-8036.

National Reading Research Center
Universities of Georgia and Maryland
Reading Research Report No. 29
Fall 1994

Teacher Perceptions of Students' Motivation to Read

Anne P. Sweet
U.S. Department of Education

John T. Guthrie
University of Maryland College Park

Abstract. *This exploratory study examined teachers' perceptions of students' motivation to read in school-based settings. The objectives of the study were threefold: (1) to explore teachers' perceptions of student's motivation to read; (2) to develop and field-test a questionnaire to determine teacher perceptions of students' motivation to read; and (3) to study the relationship between teacher perceptions of students' motivation to read and reading achievement. Focus groups of third- and fifth-grade teachers were convened and given an initial questionnaire to ascertain what teachers "see" when they think students are motivated to read. A second questionnaire based on those findings was developed and field-tested with third- and fifth-grade teachers and students. Questionnaire items clustered conceptually into five categories: Involvement, Strategies in Reading, Social, Written Expression, and Persistence. This interwoven series of conceptually cohesive item groupings supported the notion that teachers possess a highly integrated construct of students' motivation to read. Data on students' achievement were also collected and analyzed. For students in grade five, those perceived by teachers to be highly motivated to read also had high report-card grades in reading and social studies. Conversely, those fifth-grade students perceived by teachers to be low in motivation to read had low report-card grades in reading and social studies. Across grades three and five, the pattern was stronger: those students perceived by teachers to be highly motivated to read also had high report-card grades in all school subjects; conversely, students perceived by teachers to be unmotivated to read had low report-card grades in all school subjects. Preliminary results indicated that students perceived by teachers to be highly motivated were, compared to less motivated students, younger and received higher report-card grades across all school subjects; they had especially high grades in reading and social studies. Students whom teachers perceived as more highly motivated to read were the same students they graded more highly on report cards. No gender differences in students' perceived level of reading motivation were found, nor were there gender differences in students' level of achievement.*

Teaching students to become literate involves tending to a myriad of elements related to students' motivational and affective states as well as to their cognitive development. Hidi (1992, 1990) observed that "although it is now recognized that affective factors influence the selection, processing, and retention of information, little progress has been made in actually inte-

grating the motivational and affective aspects of learning with the cognitive ones" (p. 215).

Until recently, research on reading and reading instruction focused almost exclusively on the cognitive aspects of reading acquisition. As a result, we have made advances in knowledge about basic cognitive processes during the last two decades, particularly processes involved in reading comprehension (Anderson & Pearson, 1984; Brown, 1980; Rumelhart, 1980), and basic instructional processes as well (Baker & Brown, 1984; Guthrie, McGough, & Bennett, 1994; Palinscar & Brown, 1984; Pressley, Schuder, & Bergman, 1992). Conversely, we know far less about the development of children's motivation for reading. Although general theories of achievement motivation are plentiful and have a considerable history (e.g., Bandura, 1977; Crutchfield, 1962; Deci & Ryan, 1985; Dweck, 1986; Wigfield & Eccles, 1992; Zimmerman, Bandura, & Martinez-Pons, 1992), theories of motivation for reading do not run a parallel course. At present, we do not have fully developed theories of motivation that are specific to literacy acquisition. Researchers (e.g., Gambrell, 1994; Oldfather, 1994) are beginning to examine motivation more fully as it relates specifically to literacy events.

Wigfield and Eccles (1992) have reported that three factors predict achievement and choice: *competence beliefs and efficacy*, *interest in learning*, and *achievement goals*. These researchers posit that children's motivation to engage in academic tasks is an important predictor of their school performance and their choices of particular academic activities to pursue. This supposition is based on a body of work that shows competence and efficacy beliefs to be strong predictors of performance on academic tasks; interest and achievement goals predict the choice of tasks and the level of engagement in those tasks. Within this framework, it is plausible that students' motivation to learn to read may be central to predicting their school performance in later years.

In addition to predicting school achievement, motivational constructs predict the use and self-regulation of cognitive strategies for learning from text. In particular, intrinsic value and self-efficacy (Pintrich & DeGroot, 1990), as well as task involvement (Nolen, 1988), are highly associated with students' self-reports of self-regulated learning. Although several motivation theories refer to school learning in general (Deci, Hodges, Pierson, & Tomassone, 1992; Pintrich & DeGroot, 1990; Wigfield & Karpathian, 1991), it is likely that these theories can be applied to the acquisition of competence in literacy as well as to the acquisition of knowledge through the use of reading and writing skills. Many of these theories have used reading data or performance in English classes as variables in their analyses, and there appears to be merit in the widely held notion that students' success at reading is affected by their motivation to read. Motivation is viewed as an important factor in students' acquisition of reading competence and their use of strategies for gaining conceptual knowledge.

Several theories of motivation include a distinction between *intrinsic* and *extrinsic motivation*. Intrinsic motivation refers to an internal state that drives the doer to engage in an activity. An intrinsically motivated learner, for example, will choose books and read them

during free time. Extrinsic motivation is prompted by an incentive that is external to the doer. A student who completes an assigned reading task primarily to meet course requirements is extrinsically motivated. Numerous studies have been conducted on students' intrinsic motivation and the autonomy-orientation of the classroom environment (e.g., Deci, Nezlek, & Scheiman, 1981; Grolnick & Ryan, 1987), showing a positive relationship between them. Yet few reading teachers are aware of the relationship between intrinsic and extrinsic motivation and their associated classroom conditions (Lepper, Greene, & Nisbett, 1973). Consequently, we were interested in the extent to which teachers described students in terms of intrinsic versus extrinsic motivation. We also wanted to know whether teachers combined cognitive and strategic characteristics with motivational qualities in their descriptions of motivated students.

Although student self-reports have been used most frequently to study children's motivation, teacher perceptions are also likely to be valuable. Skinner and her colleagues (1990, 1993) have reported that teacher perceptions of student engagement were found to have reciprocal effects with students' self-report of perceived control and academic performance (Skinner, Wellborn, & Connell, 1990). Specifically, students' self-report of perceived control influenced academic performance by promoting students' learning engagement (as reported by teachers) and teachers positively influenced students' perceived control via their contingency and involvement (as reported by students). In a subsequent study (Skinner & Belmont, 1993) that examined the associations between teacher behavior and student engagement over the course of a school year, teacher perceptions of student engagement appeared to have reciprocal effects with teachers' own behavior as well as with students' self-reports of engagement. It appears that although relatively little is known about teacher perceptions of students' motivation, gaining a better understanding of this issue could add to the knowledge base about students' motivation, improve predictions of academic performance, and help describe teachers themselves.

The objectives of this exploratory study were threefold: (1) to explore teachers' perceptions of students' motivation to read; (2) to develop and field-test a questionnaire to determine teacher perceptions of students' motivation to read; and, (3) to study the relationship between teacher perceptions of students' motivation to read and reading achievement. The scale that was developed can be used for a variety of purposes such as (1) contributing to a reading performance assessment, (2) extending a reading portfolio, (3) contributing to program evaluation, and (4) serving as a research tool for studies focusing on motivation and reading development.

METHOD

Questionnaire Development and Administration

In the spring of 1993, focus groups of teachers were convened in Prince George's County, Maryland to ascertain what teachers "see" that makes them think students are motivated to read. In two separate sessions, two

third-grade and two fifth-grade teachers, along with one elementary school reading specialist, were asked to reflect on students whom they considered to be motivated readers and to describe their characteristic behaviors. During each of these sessions, teachers were also asked to rate each of these student behaviors in terms of whether they indicated high, medium, or low levels of motivation to read. None of the behaviors described by teachers were rated as indicative of low reading motivation by any teachers who participated in the focus groups. The information gathered from focus group meetings reflected the teachers' knowledge and their classroom experiences with children. This material was used to develop a 62-item questionnaire in a Likert-type response format. The resulting *Teacher Questionnaire on Student Motivation to Read (TQOSMTR)* reflects observable student behaviors that teachers indicated as characteristic of students who are motivated to read (see Appendix A).

It should be emphasized that this was an exploratory study in a line of research that is in its infancy; as such, it fell into the realm of theory-building under the construct of engaged reading (Alvermann & Guthrie, 1993). The questionnaire that was field-tested contained a relatively large number of items (62) in order to fully capture those student behaviors that teachers viewed as important indicators of children's motivation to read. The questionnaire was field-tested in the fall of 1993. Teachers completed the questionnaires in late November and early December of 1993, usually during instructional planning time or before or after school.

Subjects and Design

In order to field-test the questionnaire, eight third- and fifth-grade teachers, four from each grade, were chosen from two schools; teachers used the questionnaire to assess the reading motivation of students in their classrooms. Each teacher, all but one of whom were female, assessed six students using the questionnaire (N = 48 cases). Half of the teachers were volunteers, while the other half were preselected in conjunction with related studies being conducted by researchers at the National Reading Research Center, University of Maryland at College Park component. Schools from which teachers and students were drawn were situated within the Washington, DC metropolitan area (Prince George's County, Maryland). One of the two schools catered to orthopedically mainstreamed children. The students who participated in the study were selected from groups of high-, medium-, and low-achievers. Levels of achievement were based on teacher judgment. Each teacher selected six students, two from each of the top, middle, and bottom thirds of the class in terms of reading ability. Half of the students in this study were participating in a related NRRC study in which an innovative classroom program, *Concept-Oriented Reading Instruction*, was being used (see Guthrie, McGough, & Bennett, 1993). The program was designed to increase students' motivation in the long-term.

Subjects, who were placed in groups of equal size by grade, were low- to middle-income elementary school students enrolled in schools with ethnically diverse populations. Children ranged in age from 8 years to 12.5

years (for grade 3, M = 8.6 years, SD = .418 years; for grade 5, M = 10.8 years, SD = .578 years). Girls constituted 52% and boys 48% of the sample: 50% girls and 50% boys at grade 3; 46% girls and 54% boys at grade 5. Socioeconomic status was lower- to middle-class, as gauged by the number of children who received free or reduced-price lunch (44% of children received free or reduced-price lunch). Students were predominantly African American (50%), with the remainder Caucasian (29%), Hispanic (13%), Asian (6%), and Native American (2%).

Measures

The questionnaire included five response choices for each of the 62 items (student behaviors): *no opportunity to observe, rarely, seldom, sometimes,* and *often*. Each choice was defined for teachers and a sample item was used to demonstrate how an item should be read and a corresponding answer choice selected (see Appendix A). The first response choice was defined as: *Not applicable; no opportunity to observe*. *Rarely* was defined as: *You have observed the student exhibit this behavior only once, twice,* or *never*. *Seldom* was defined as: *You have observed the student exhibit this behavior several times over a two-month period*. *Sometimes* was defined as: *The student exhibits this behavior only once or twice a week*. And *Often* was defined as: *The student exhibits this behavior nearly every day for substantial amounts of time*.

The sample item that was used for demonstration purposes was: *Chooses to go to the library*. The answer response *Sometimes* was circled. This sample item was typical of those drawn from the pool of behaviors generated by focus groups of teachers. An example of an item that teachers responded to on the questionnaire is: *Has a book nearby and reads it whenever time permits*. Both positively and negatively worded items (e.g., *Easily distracted while reading*.) were used. All score totals were calculated by averaging the items, with negative items reverse-coded, so that scores ranged from 0 to 4, with 4 indicating higher student motivation. Summary scores were calculated on 15 items culled from factor analyses and item analyses, the details of which follow.

Measures of achievement for third-grade students consisted of report-card grades in reading, language, spelling, social studies, science, and mathematics, as well as standardized achievement test scores, generated by the Comprehensive Tests of Basic Skills (CTBS) in reading, spelling, vocabulary, and mathematics. For fifth-grade students, indicators of achievement consisted of report-card grades in reading, language, spelling, social studies, science, and mathematics; CTBS scores were not available for grade five. Students' eligibility for free or reduced-price lunch was used as an indicator of family socioeconomic status.

RESULTS

Development of Teacher Perception Questionnaire on Students' Motivation to Read

In accordance with a main objective of this study—to develop and field-test a teacher perceptions questionnaire of students' motivation

Table 1. Factor(1) Matrix: Teacher Questionnaire (Revised) on Students' Motivation to Read

	Items	Factor 1
15.	"Hides" in books	.790
10.	Discussion with teacher and peers is complex — including motivations, plot, and personal response	.779
11.	Wants to write about what he/she reads	.764
6.	Gets so totally absorbed while reading that he/she doesn't sense someone approaching	.755
9.	Talks about his/her feelings related to a book or story	.744
1.	Is a voracious reader	.742
7.	Easily discouraged when he/she encounters difficult text	.739
8.	Finds out how to understand difficult text by rereading, asking questions, etc.	.719
12.	Journal writing is incomplete or superficial	.717
3.	Has a book nearby and reads it whenever time permits	.700
14.	Knows how to choose a book he/she would want to read	.694
13.	Writes personal responses in journal regularly and often	.693
4.	Easily distracted while reading	.688
2.	Sharply focused while reading	.687
5.	Have to tell him/her to get a book to read	.682

α = .95

to read—an analysis of all 62 items on the questionnaire was conducted. This instrument, referred to as the *Initial Questionnaire*, is shown in Appendix A. To examine whether teachers' perceptions are unidimensional or multidimensional, we conducted factor analy-

ses with principal components and varimax rotation, requesting a one-factor solution, a two-factor solution, and a three-factor solution. The one-factor solution was most satisfactory; it accounted for 38.2% of the variance. The two- and three-factor solutions did not add substantially to the variance accounted for by the one-factor solution. Furthermore, the two-factor and three-factor solutions contained double loadings, and the items did not form a pattern of emphasis on any theme within the questionnaire. Since the one-factor solution was the most defensible statistically and most cogent theoretically, we concluded that teacher perceptions of student motivation were represented by one dimension. Teachers rated students as relatively high or low on a single quality; they did not differentiate between types of motivation. We acknowledge, however, that the results of factor analyses may be suspect given the limited number of data points per item.

To construct a more efficient instrument, we assembled a set of items drawn from the items that had the highest loadings on the factor in the one-factor solution. Items that were answered with more than 20% of *no opportunity to observe* responses were eliminated from this new set because we wanted items that would be useful in the future for the large majority of teachers and students. Fifteen items, which are referred to as the *Revised Questionnaire* (see Appendix B), were subjected to factor analysis with principal components and varimax rotation. The factor loadings all exceeded .68 and the reliability (Chronbach's alpha) was .95, showing relatively high internal consistency. Items in the *Revised Questionnaire* appear in Table 1, along with the rotated factor matrix for the one-factor solution; the correlation matrix for these 15 items is shown in Table 2.

It is noteworthy that nearly half of the motivated reading behaviors that were elicited from focus group teachers (28 out of 62 items) were not readily observed by those teachers who used the *Initial Questionnaire* to rate their students' motivation to read; these items were eliminated. Moreover, the vast majority of behaviors noted by teachers in focus groups were intrinsic (learning oriented) rather than extrinsic (ego oriented) in nature.

Teacher Perceptions of Students' Motivation to Read—Item Clusters

In accordance with another objective of this study—to explore teachers' perceptions of students' motivation to read—we examined the themes within teachers' perceptions by grouping the items from the *Revised Questionnaire* into clusters. Clusters of items appeared to fall into five categories: *Involvement, Strategies for Reading, Social, Written Expression,* and *Persistence.*

Category I: *Involvement*—Items 1, 2, 4, 6, and 15 clustered to form a group of behaviors that were indicative of involvement. The dimensions of involvement in this context are *understanding* and *concentration* (Reed & Schallert, 1993). They use the term *discourse involvement* defined as a state of engagement in a task that is influenced by cognitive and motivational/affective factors. This construct describes the intensity of interaction between the reader and the text. Items that suggested

Table 2. Correlation Matrix: Teacher Questionnaire (Revised) on Students' Motivation to Read

Items	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Voracious reader	---	.63**	.83**	.46*	.70**	.70**	.45*	.63**	.39*	.50**	.43*	.64**	.72**	.82**	.65**
2. Focused while reading		---	.59**	.62**	.50**	.66**	.46*	.62**	.53**	.40*	.50**	.45*	.35	.44*	.60**
3. Reads whenever time permits			---	.46*	.70**	.66**	.45*	.58**	.44*	.37	.47*	.64**	.69**	.81**	.69**
4. Easily distracted while reading				---	.65**	.47*	.72**	.59**	.44*	.50**	.49**	.55**	.34	.33	.46*
5. Have to tell him/her to get a book to read					---	.53**	.57**	.65**	.35	.35	.34	.71**	.63**	.66**	.57**
6. Get so totally absorbed while reading that ...						---	.56**	.59**	.47*	.47*	.55**	.46*	.49**	.51**	.68**
7. Easily discouraged when he/she encounters ...							---	.48**	.44*	.59**	.64**	.63**	.39*	.36	.57**
8. Finds out how to understand difficult text ...								---	.57**	.56**	.43*	.59**	.58**	.59**	.47*
9. Talks about his/her feelings related to a ...									---	.65**	.67**	.28	.43*	.37	.46*
10. Discussion with teacher and peers is ...										---	.56**	.50**	.40*	.39*	.44*
11. Wants to write about what he/she reads											---	.47*	.57**	.46*	.68**
12. Journal writing is incomplete or superficial												---	.64**	.72**	.62**
13. Writes personal responses in journal regularly...													---	.87**	.56**
14. Knows how to choose a book he/she would...														---	.59**
15. "Hides" in books															---

* $p < .01$; ** $p < .001$

Note: $N = 45$ students; $N = 8$ teachers. Grades 3 and 5 combined.

BEST COPY AVAILABLE

involvement were: (1) *Is a voracious reader*; (2) *Sharply focused while reading*; (4) *Easily distracted while reading* (reverse-coded to mean, not easily distracted); (6) *Gets so totally absorbed while reading that he/she doesn't sense someone approaching*; and (15) *"Hides" in books*.

Category II: *Strategies for Reading*—Items 3, 8 and 14, were linked in that they reflected the use of strategies for reading. These items were: (3) *Has a book nearby and reads it whenever time permits*; (8) *Finds out how to understand difficult text by rereading, asking questions, etc.*; and (14) *Knows how to choose a book he/she would want to read.*

Category III: *Social*—Items 9 and 10 formed a coupling of items that represented children's motivated reading behaviors that are social in nature. These items were: (9) *Talks about his/her feelings related to a book or story*, and (10) *Discussion with teacher and peers is complex—including motivations, plot, and personal response.*

Category IV: *Written Expression*—Items 11, 12, and 13 adhered to form a cluster of items that represented students' written expression. These items were: (11) *Wants to write about what he/she reads*; (12) *Journal writing is incomplete or superficial* (reverse-coded to mean complete or with depth); and (13) *Writes personal responses in journal regularly and often.*

Category V: *Persistence*—Items 5, 7, and 8 formed a cluster of behaviors that were characteristic of persistent learners. Persistence is the continuous concentration on a task, especially when the task challenges the skill or understanding of the learner (Nicholls, 1989). These items were: (5) *Have to tell him/her to get a book to read* (reverse-coded to mean, do not have to tell); (7) *Easily discouraged when he/she encounters difficult text* (reverse-coded to mean not easily discouraged); and (8) *Finds out how to understand difficult text by rereading, asking questions, etc.*

Although these categories of items are diverse, they formed one strong construct as evidenced by the fact that they formed a single factor in the factor analysis, and they shared high internal consistency. In sum, children's reading motivation, as perceived by teachers in this study, appeared to be a highly integrated construct with interwoven themes. It appears that teachers possess an integrated construct of students' motivation to read. This tapestry of attributes was reflected in the series of item groupings that emerged from an examination of the *Revised Questionnaire*. This composite of attributes is consistent with the theoretical expectation that engagement in reading includes cognitive, social, and motivational dimensions (Guthrie, McGough, & Bennett, 1994).

Teacher Perceptions of Students' Motivation to Read—Item Frequencies

Table 3 contains descriptive statistics for the 15-item *Revised Questionnaire*. To examine teacher responses to questionnaire items, we analyzed the frequency of response rates for all items, categorized by response choices for each item: *no opportunity to observe, rarely, seldom, sometimes,* and *often*. Frequency data (response choice percentages) for the *Revised Questionnaire* are also depicted in Table 3. A full breakdown of the percentages of teachers' response choices for all items is located in Appendix C. The purpose of this analysis was to ascertain whether any patterns of response were meaningful.

An examination of frequency data for the response choice, *often*, revealed that seven items had frequencies of 23% or higher (items

Table 3. Means, Standard Deviations and Percent Response Choices (%): Teacher Questionnaire (Revised) on Student Motivation to Read

	Items	*M*	*SD*	NA	Rarely	Seldom	Sometimes	Often
1.	Is a voracious reader	2.25	1.25	12.5	14.6	22.9	35.4	14.6
2.	Sharply focused while reading	3.00	.945	0	8.3	18.8	37.5	35.4
3.	Has a book nearby and reads it whenever time permits	2.42	1.24	8.3	14.6	27.1	27.1	22.9
4.	Easily distracted while reading	2.50	1.15	4.2	12.5	39.6	16.7	27.1
5.	Have to tell him/her to get a book to read	2.46	1.20	10.4	2.1	43.8	18.8	25.0
6.	Gets so totally absorbed while reading that he/she doesn't sense someone approaching	2.25	1.26	8.3	27.1	12.5	35.4	16.7
7.	Easily discouraged when he/she encounters difficult text	2.31	1.29	10.4	16.7	27.1	22.9	22.9
8.	Finds out how to understand difficult text by rereading, asking questions, etc.	2.63	1.00	6.3	6.3	18.8	56.3	12.5
9.	Talks about his/her feelings related to a book or story	2.75	1.04	0	16.7	18.8	37.5	27.1
10.	Discussion with teacher and peers is complex—including motivations, plot, and personal response	2.08	1.37	18.8	16.7	16.7	33.3	14.6
11.	Wants to write about what he/she reads	2.49	1.12	6.3	10.4	29.2	33.3	18.8
12.	Journal writing is incomplete or superficial	2.50	1.40	14.6	6.3	27.1	18.8	33.3
13.	Writes personal responses in journal regularly and often	2.69	1.13	10.4	2.1	14.6	54.2	18.8
14.	Knows how to choose a book he/she would want to read	3.04	1.32	12.5	4.2	33.3	45.8	4.2
15.	"Hides" in books	1.79	1.29	16.7	33.3	14.6	25.0	10.4

2, 3, 4, 5, 7, 9, and 12). Items 2, 4, and 9 had the highest frequencies: 35%, 27%, and 27%, respectively. An examination of frequency data for the response choice, *sometimes*, revealed that 12 items had frequencies of 23% or higher (items 1, 2, 3, 6, 7, 8, 9, 10, 11, 13, 14, and 15). Items 8, 13, and 14 had the highest frequencies at 56%, 54%, and 46%, respectively. It is instructive to note that two of these items, 8 and 14, represented behaviors that were indicative of students' strategy use and classified as such under Category II, *Strategies for Reading*, in the item schema presented earlier. Moreover, when the frequencies of item 8 (*Finds out how to understand difficult text by rereading, asking questions, etc.*) and item 14 (*Knows how to choose a book he/she would want to read*) were summed across the *sometimes* and *often* answer choices, percentages of 69 and 50 were produced. Clearly, teachers who participated in the field test were often able to observe these specific behaviors in their students. Teachers in the focus groups had also viewed these uses of strategy as indicators of students' motivated reading behavior.

The lowest frequencies under the *often* answer choice occurred for items 1, *Is a voracious reader*, (15%) and 15, *"Hides" in books*, (10%). When percentages were summed across the *often* and *sometimes* answer choices, the highest summed percentage occurred for item 2, *sharply focused while reading*, (73%), while the lowest combined percentage occurred for item 15 (35%). Items 2 and 15 represented behaviors that were indicative of students' discourse *Involvement* and were classified as such under Category I. Item 2 appeared to capture much more fully the typical teachers' construct of a typically motivated reading behavior. Motivated students, while they seemed *sharply focused*, did not *hide* in books.

In contrast, an examination of frequency data for the response choice, *rarely*, revealed that all but two items (6 and 15) had frequencies of 17% or lower. Item (6), *Gets so totally absorbed while reading that he/she doesn't sense someone approaching* and *(15) "Hides" in books*, had frequencies of 27% and 33%, respectively. Both items adhered together conceptually under the *Involvement* category in the item schema presented earlier. Those items that received the lowest frequencies, 10% or lower, were: item 2 (8%); item 5 (2%); item 8 (6%); item 11 (10%); item 12 (6%); item 13 (2%); and item 14 (4%). Of these items, numbers 8 and 14 were clustered conceptually under the *Strategies for Reading* category, and three items—numbers 11, 12, and 13—were clustered to make up Category IV, *Written Expression*. Item 12 (*Journal writing is incomplete or superficial*) was worded negatively. In such an instance, if the teacher rarely observed the behavior, it could be inferred that the student exhibited the opposite behavior. Another item with a very low frequency, item 5 (2%), was also worded negatively (*Have to tell him/her to get a book to read*). The same interpretative logic applies here.

An examination of frequency data for the response choice, *seldom*, revealed that all but three items had frequencies that were 29% or lower, and two of these were negatively worded items: (4) *Easily distracted while reading*; and (5) *Have to tell him/her to get a book to read*. The third item, number 14, had a frequency of 33%. This item was categorized as

an indicator under the *Strategies for Reading* category. When frequency percentages were summed across the *rarely* and *seldom* answer choices, the lowest combined percentage occurred for item 13 (17%). This item, *Writes personal responses in journal regularly and often*, is categorized as a descriptor under the *Written Expression* category. Moreover, item 13 was one of two items that dealt with writing as opposed to reading per se. The highest combined percentages, disregarding those for negatively worded items, occurred for numbers 3 (42%), 6 (40%), and 15 (48%). However, combined percentages on the *rarely* and *seldom* answer choices for items 3 and 6 were less than the combined percentages on the *sometimes* and *often* answer choices—50% and 52%, respectively.

By and large, it appears that teachers observed student behaviors embodied in the *Revised Questionnaire* with a modest to relatively high degree of frequency under the *often* and *sometimes* answer choices and with a modest to relatively low degree of frequency under the *rarely* and *seldom* answer choices. These observations were in keeping with teachers' constructs about what constitutes motivated reading behavior on the part of students.

Relationships Between Teacher Perceptions and Reading Achievement

In keeping with the third objective of this study—to investigate the relationship between teacher perceptions of students' motivation to read and reading achievement—data from the *Revised Questionnaire* on teacher perceptions were correlated with student achievement data to examine the relationship between teacher perceptions of students' reading motivation and their students' level of cognitive competence. Relationships between teacher perceptions of children's reading motivation and gender, socioeconomic status, and age were also explored.

An examination of the Pearson product moment correlation coefficients for grades three and five combined yielded positive and significant correlations for students' reading motivation and all academic subjects. Teacher perceptions of motivation correlated with report-card grades in reading ($r = .50$), language ($r = .41$), spelling ($r = .44$), social studies ($r = .51$), science ($r = .45$), and mathematics ($r = .40$), all of which were significant at $p < .01$.

Intercorrelations for grade three revealed no significant correlations for students' motivation to read and achievement using either report-card grade and CTBS scores, nor were there significant intercorrelations between students' motivation to read and age, gender, or socioeconomic status. While inference testing did not yield correlations that were significant at the $p < .01$ level, coefficients for the correlations between students' reading motivation and report-card spelling and CTBS vocabulary approached significance ($r = .35$ and $r = .44$, respectively). A similar examination of the correlation coefficients for grade five showed positive and significant correlations between students' motivation to read and report-card grades in reading and social studies. Moreover, coefficients for the intercorrelations between children's reading motivation and report-card language ($r = .38$), spelling ($r = .40$), science ($r = .46$), and math ($r = .43$) approached significance.

Table 4. Means and Standard Deviations for High/Low Student Motivation to Read—Grade 3

	Low Motivation Group (N = 6)		High Motivation Group (N = 17)			
	M	*SD*	*M*	*SD*	*t*	*p*
Age	8.56	.39	8.58	.45	-0.13	>.05
Reading	3.67	.82	4.18	.73	-1.43	>.05
Language	3.50	.55	3.88	.60	-1.37	>.05
Spelling	3.83	.75	4.35	.61	-1.70	>.05
Social Studies	3.60	1.34	4.38	.65	-1.70	>.05
Science	4.20	.45	4.53	.62	-1.09	>.05
Mathematics	3.67	.52	4.06	.75	-1.18	>.05

Note: Indices of achievement are based on report card grades

In order to describe the relationship between teachers' perceptions of students' motivation to read, and students' school achievement, associations were examined between low- and high-motivation students' and other variables: school achievement, age, and socioeconomic status. These relationships were explored for grades three and five separately and across grades three and five combined. In order to conduct these analyses, we computed correlations. Students were placed into groups of low- and high-motivation by compiling frequency data on total scores obtained from administration of the *Revised Questionnaire* to teachers. Those students with scores above the median were categorized as more highly motivated and those below the median as less highly motivated. Next, *t* tests were conducted on these data; findings are reported in Tables 4, 5, and 6.

An examination of these data permits a description of students who were perceived by teachers to be more or less motivated to read in relation to their age, socioeconomic status, and achievement. Due to the preliminary nature of this study, however, and the limited number of subjects, findings obtained from analyses of subgroups (e.g., high/low motivation, age, and gender) are most tentative. For grades three and five combined, all mean differences were significant at the $p < .05$ level or higher, except for socioeconomic status. The mean chronological age for students in the low-motivated group was 10.15 years, while the mean age for children in the high-motivated group was 9.33 years. Thus, it appeared that those students who were judged by teachers to be more highly motivated to read were younger than those perceived to be less motivated. For grade five separately, mean differences were

Table 5. Means and Standard Deviations for High/Low Student Motivation to Read—Grade 5

	Low Motivation Group (N = 14)		High Motivation Group (N = 8)			
	M	*SD*	*M*	*SD*	*t*	*p*
Age	10.83	.68	10.92	.38	-0.32	> .05
Reading	3.14	.86	4.38	.92	-3.15	< .05
Language	3.14	.66	3.75	.89	-1.83	> .05
Spelling	3.36	1.15	4.25	.71	-1.98	> .05
Social Studies	3.21	.89	4.25	.71	-2.81	< .05
Science	3.57	.65	4.25	.71	-2.29	< .05
Mathematics	3.29	.99	4.13	.64	-2.14	< .05

Note: Indices of achievement are based on report card grades

significant for reading, social studies, science, and mathematics, while there were no significant differences for grade three separately.

With regard to achievement, where report card grades ranged from 1 to 5 in point value and 5 represents the highest grade, a common pattern emerged across school subjects (see Table 4). This pattern seemed to be most pronounced in reading and social studies across grades three and five combined, as well as in grade five separately. It appeared that students in the low-motivated group(s) achieved less highly than students in the high-motivated group(s). It seemed that students whom teachers perceived as more highly motivated to read were the same students they graded more highly on report cards.

Frequency data were obtained for students in the low-motivated versus the high-motivated groups. There was a greater percentage of students in the high-motivated group (56%) than the low-motivated group (44%). Chi-square analyses revealed no significant differences between the number of girls classified as high-motivated and low-motivated and the number of boys ($\chi_1 = .218, p > .05$). In addition, t tests revealed no significant gender differences in reading, language, spelling, social studies, science, and mathematics achievement.

DISCUSSION

Summary of Findings

A *Questionnaire on Teacher Perception of Students' Motivation to Read* was developed and field-tested. Teachers' constructs of children's motivated reading behaviors emerged as one strong factor when field-test data were factor analyzed. The *Revised Questionnaire* was found to have content and face validity,

Table 6. Means and Standard Deviations for High/Low Student Motivation to Read—Grades 3 and 5 Combined

	Low-Motivation Group (N = 20)			High-Motivation Group (N = 25)				
	M		*SD*	*M*		*SD*	*t*	*p*
Age	10.15		1.23	9.33		1.19	2.27	< .05
Reading	3.30		.87	4.24		.78	-3.83	< .001
Language	3.25		.64	3.84		.69	-2.95	< .05
Spelling	3.50		1.05	4.32		.63	-3.25	< .05
Social Studies	3.32	(N = 19)	1.00	4.33	(N = 21)	.66	-3.83	< .001
Science	3.74	(N = 21)	.65	4.44	(N = 25)	.65	-3.54	< .05
Mathematics	3.40		.88	4.08		.70	-2.88	< .05

Note: Indices of achievement are based on report card grades

based on teachers' constructs of students' motivated reading behaviors, and reliability, based on a high index of internal consistency that was obtained by applying Cronbach's alpha (α = 0.95). For 45% of the items in the initial questionnaire, frequency of teacher response for the *no opportunity to observe* choice exceeded 20% (of which, 21% were items that loaded highly on factor solution one). Moreover, items in the *Revised Questionnaire* appeared to cluster conceptually into five categories: *Involvement, Strategies in Reading, Social, Written Expression, and Persistence*. This interwoven series of conceptually cohesive item groupings supports the notion that teachers possess a highly integrated construct of students' motivation to read.

Nearly half of the motivated reading behaviors that were elicited from focus group teachers were not readily observed by those teachers who used the *Initial Questionnaire*; this may be attributable to the way information was elicited from and ranked by focus-group teachers. Teachers were not asked to think about the motivated behaviors of specific children; they may have identified a large number of student behaviors that occurred rarely, but because these rarely observed behaviors fit into most teachers' schema of a motivated reader, many of them rated these behaviors as indicative of high reading motivation. Also, some teachers might not have been able to observe many of these behaviors. Teachers with large classes or those who have multiple responsibilities may find it difficult to interact with students on an individual or small-group basis.

It appeared that the behaviors noted by focus-group teachers as being highly associated with motivated readers were almost exclusively

ascribed to students' internal motivation. For example, only a few behaviors cited were indicative of student competitiveness. Item 57, *Works very hard to get into and stay in a top reading group*, is an example of such a behavior. The fact that the vast majority of behaviors generated by teachers were intrinsic (learning oriented) rather than extrinsic (ego oriented) in nature may also be a function of the way information was elicited from teachers in focus groups. They were asked to identify motivated student behaviors. As such, behaviors are generally considered to be personal characteristics that emanate from within.

Item analyses on the *Revised Questionnaire* revealed that item frequencies on the *sometimes* response choice reached as high as 56%. Moreover, when percentages were summed across the *often* and *sometimes* answer choices, the highest summed percentage reached 73%. In contrast, an examination of frequency data for the *rarely* answer choice revealed that most items had frequencies of 17% or lower; one dipped down to 2%. And, when percentages were summed across the *rarely* and *seldom* answer choices, the highest combined percentage was 48%. In sum, it appeared that teachers observed the student behaviors represented in the *Revised Questionnaire* with a modest to relatively high degree of frequency under the *often* and *sometimes* answer choices and with a modest to relatively low degree of frequency under the *rarely* and *seldom* answer choices. These observations appear to be in keeping with teachers' constructs about what constitutes motivated reading behavior on the part of students.

Analyses of data in the correlational studies showed that for grade five there were positive and significant correlations between students' motivation to read and report-card grades in reading and social studies. Students perceived by teachers to be highly motivated to read also had high report-card grades in reading and social studies. Conversely, those fifth-grade students perceived by teachers to be low in motivation to read had low report-card grades in reading and social studies. Across grades three and five, positive and significant correlations were found for students' reading motivation and all academic subjects: reading, language, spelling, social studies, science, and mathematics. Likewise, those students perceived by teachers to be highly motivated to read also had high report-card grades in all subjects. And, conversely, those students perceived by teachers to be unmotivated to read had low report-card grades in all subjects.

Teachers perceived more students as highly motivated to read (56%) than lacking in motivation to read (44%). Due to the preliminary nature of this study and the small sample size, findings obtained from analyses of subgroups (e.g., high/low motivation, age, and gender) are most tentative. Mean differences for students perceived by teachers to be in low- and high-motivated groups across grades three and five revealed that the mean chronological age for students in the low-motivated group was 10.15 years, while the mean age for children in the high-motivated group was 9.33 years. Thus, it appeared that those students who were judged by teachers to be more highly motivated to read were younger than those perceived to be less motivated to read. These more highly motivated students achieved more highly in all subjects, especially in reading and social studies. In sum, students perceived by teachers to

be highly motivated to read, in contrast to those perceived to be unmotivated, were younger and received higher report-card grades across all subjects, especially reading and social studies. It seems that students perceived as more highly motivated to read were the same students teachers graded more highly on report cards.

Chi-square analysis revealed no significant difference in the numbers of girls and boys classified as high-motivated and low-motivated. In addition, inference testing to compare gender with achievement in reading and other school subjects showed no significant differences between girls and boys. In sum, there were no gender differences in students' perceived level of reading motivation, nor were there any gender differences in students' level of achievement.

Implications for Future Research

The approach of this exploratory study of children's motivation complements previous research but represents a departure in that most prior research and theorizing about motivation has been based largely on self-report data from students. Skinner and her colleagues (1990, 1993) used teacher ratings of children's learning engagement in combination with students' self-reports and found that teacher perceptions added a significant dimension tc a process model in which students' perceived control appeared to influence their academic performance. Moreover, in related work using both teacher perceptions and student self-reports, these researchers found that teacher behavior (self-report) predicted children's motivation, with reciprocal effects on teacher behavior. More specifically, teacher reports of student behaviors in the fall predicted their perceptions of student engagement with learning activities in the spring, and in addition, predicted changes in their own subsequent treatment of students. It would be useful to examine whether teacher perceptions of student motivation are positively related to student changes in academic performance.

The present study showed that teachers' perceptions of students' motivation to read are interwoven tapestries of attributes that represent an integrated whole. This study should be replicated on a larger scale to determine whether the same pattern of conceptually cohesive groupings emerge when teachers evaluate students' reading motivation using the *Teacher Questionnaire on Student Motivation to Read*. Moreover, future studies should be designed to include data on both teacher perceptions and student self-reports. The purpose of studying teacher perceptions of students' motivation to read along with children's self-perceptions of their reading motivation would be to discern the degree of congruence between the two. Studies of this kind should be augmented by those in which observational, descriptive data are collected.

The finding that students' motivation to read, as perceived by teachers, appeared to be positively related to how well they do in school subjects is consistent with findings from numerous studies (e.g., Deci & Ryan, 1985; Dweck, 1986; Schunk, 1991, Wigfield & Karpathian, 1991) that focused on motivation as a general construct rather than on reading motivation per se. Further empirical inquiry into the relationship between students' reading motivation and their achievement in school

subjects should illuminate our understanding about this relationship and expand our knowledge base surrounding what it means to be an engaged reader. It would be useful to conduct larger-scale studies to examine the relationship(s) between teacher perceptions of students' motivation to read and the other variables (age, gender, and socioeconomic status) that were considered here. Research of this sort would provide us with an expanded profile of the engaged reader.

A point of particular relevance to educational practice is that the vast majority of behaviors noted by teachers in focus groups were intrinsic rather than extrinsic in nature. For example, only a few behaviors cited by teachers were indicative of student competitiveness, that is, when the student engages in an activity to receive an external reward such as recognition in the form of a high report-card grade. Although this result could have been a function of the way information was elicited from teachers in focus groups, apparently those behaviors that teachers associated with highly motivated readers were almost exclusively ascribed to students' internal motivation, such as choosing to read without being assigned to do so by the teacher. At the same time, it is a prevalent practice for some schools and school communities to focus a great deal of attention, use considerable manpower, and spend inordinate amounts of money on extrinsic motivators of student achievement such as awarding prizes to students who read the most books. Perhaps activities of this kind should be reconsidered.

A research corollary would be to determine the extent to which teachers perceive that other sources (e.g., parents, peers, school) influence the development of children's reading motivation. A natural extension of this inquiry would be to find out whether teacher perceptions about the source of students' motivation play a role in predicting students' motivation and achievement, and if so, to what extent. This would require finding out whether, and the degree to which, teachers perceive the source of students' reading motivation to be context-specific. Inquiry along these lines would broaden our knowledge about teacher perceptions of students' reading motivation and provide us with a more balanced picture of the engaged reader, especially when combined with self-report data collected from students themselves.

Author Note. The authors wish to acknowledge the cooperation of Prince George's County, Maryland teachers who participated in this study. We particularly wish to thank Sophie Kowzun, County Supervisor for Reading, Mary Ellen Rice, Reading Specialist at Calverton Elementary School, and Fran Faibisch, Reading Specialist at Catherine T. Reed Elementary School for coordinating our efforts; and to thank Qing Xie, a graduate student at the University of Maryland, for her statistical assistance.

REFERENCES

Alvermann, D. E., & Guthrie, J. T. (1993). National Reading Research Center. In A. P. Sweet & J. I. Anderson (Eds.), *Reading research into the year 2000* (pp. 129–150). Hillsdale, NJ: Erlbaum.

Anderson, R. C., & Pearson, P. D. (1984). A schema-theoretic view of basic processes in reading comprehension. In P. D. Pearson, R. Barr, M. Kamil, & P. Mosenthal (Eds.), *Handbook of reading research, 1* (pp. 255–291). White Plains, NY: Longman.

Baker, L., & Brown, A. (1984). Cognitive monitoring in reading. In J. Flood (Ed.), *Understanding reading comprehension* (pp. 21–44). Newark, DE: International Reading Association.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84*, 191–215.

Brown, A. L. (1980) Metacognitive development and reading. In R. J. Spiro, B. C. Bruce, & W. F. Brewer (Eds.), *Theoretical issues in reading comprehension* (pp. 453–482). Hillsdale, NJ: Erlbaum.

Comprehensive Test of Basic Skills (CTBS) (1991). *Technical Report*, (4th ed.). Monterey, CA: Macmillan/McGraw-Hill Co.

Crutchfield, R. S. (1962). Conformity and creative thinking. In H. E. Gruber, G. Terrell, & M. Wertheimer (Eds.), *Contemporary approaches to creative thinking* (pp. 120–140). Englewood Cliffs, NJ: Prentice-Hall.

Deci, E. L., Nezlek, J., & Scheiman, L. (1981). Characteristics of the rewarder and intrinsic motivation of the rewardee. *Journal of Personality and Social Psychology, 40*, 1–10.

Deci, E. L., & Ryan, R .M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum.

Deci, E. L., Hodges, R., Pierson, L. H., & Tomassone, J. (1992). Autonomy and competence as motivational factors in students with learning disabilities and emotional handicaps. *Journal of Learning Disabilities, 25*(7), 457–471.

Dweck, C. S. (1986). Motivational processes influencing learning. *American Psychologist, 41*, 1040–1048.

Gambrell, L. (in press). *Elementary students' motivation to read*. National Reading Research Center, Universities of Georgia and Maryland.

Grolnick, W. S., & Ryan, R. M. (1987). Autonomy in children's learning: An experimental and individual difference investigation. *Journal of Personality and Social Psychology, 52*, 890–898.

Guthrie, J. T., McGough, K., & Bennett, L. (1994). *Concept-oriented reading instruction: An integrated curriculum to develop motivations and strategies for reading*. Reading Research Report No. 10. National Reading Research Center, Universities of Georgia and Maryland.

Hidi, S. (1990). Interest and its contribution as a mental resource for learning. *Review of Educational Research, 60*(4), 549–71.

Hidi, S., & Anderson, V. (1992). Situational interest and its impact on reading and expository writing. In Renniger, K. A., Hidi, S., & Krapp, A. (Eds.), *The role of interest in learning and development*. Hillsdale, NJ: Erlbaum.

Lepper, M. R., Greene, D., & Nisbett, R. E. (1973). Understanding children's intrinsic interest with external rewards. *Journal of Personality and Social Psychology, 28*, 124–137.

Nicholls, J. G., (1989). *The competitive ethos and democratic education*. Cambridge, MA: Harvard University Press.

Nolen, S. B. (1988). Reasons for studying: Motivational orientations and study strategies. *Cognition and Instruction, 5*(4), 269–287.

Oldfather, P. (1994). *When students do not feel motivated for literacy learning: How a responsive classroom culture helps*. Reading Research Report No. 8. National Reading Research Center, Universities of Georgia and Maryland.

Palinscar, A. S., & Brown, A. (1984). Reciprocal teaching of comprehension-fostering and comprehension-monitoring activities. *Cognition and Instruction, 2*, 117–175.

Pintrich, P. R., DeGroot, E. V. (1990). Motivational and self-regulated learning components of classroom academic performance. Special Section: Motivation and efficacy in education:

Research and new directions. *Journal of Educational Psychology, 82*(1), 33-40.

Pressley, M., Schuder, T., & Bergman, J. (1992). A researcher-educator collaborative interview study of transactional comprehension strategies instruction. *Journal of Educational Psychology, 84*, 231-46.

Reed, J. H., & Schallert, D. L. (1993). The nature of involvement in academic discourse tasks. *Journal of Educational Psychology, 85*(2), 253-266.

Rumelhart, D. (1980). Schemata: The building blocks of cognition. In R. J. Spiro, B. C. Bruce, & W. F. Brewer (Eds.), *Theoretical issues in reading comprehension* (pp. 38-58). Hillsdale, NJ: Erlbaum.

Schunk, D. H., (1991). Self-efficacy and academic motivation. *Educational Psychologist, 26*, 207-232.

Skinner, E. A., Wellborn, J. G., & Connell, J. P. (1990). What it takes to do well in school and whether I've got it: A process model of perceived control and children's engagement and achievement in school. *Journal of Educational Psychology, 82*(1), 22-32.

Skinner, E. A., & Belmont, M. J. (1993). Motivation in the classroom: Reciprocal effects of teacher behavior and student engagement across the school year. *Journal of Educational Psychology, 85*(4), 571-581.

Wigfield, A., Karpathian, M. (1991). Who am I and what can I do? Children's self-concepts and motivation in motivational theory and research. *Educational Psychologist, 26*(3,4), 233-261.

Wigfield, A., & Eccles, J. S. (1992). The development of academic task values: A theoretical analysis. *Developmental Review, 12*, 265-310.

Zimmerman, B. J., Bandura, A., Martinez-Pons, M. (1992). Self-motivation for academic attainment: The role of self-efficacy beliefs and personal goal setting. *American Educational Research Journal, 29*(3), 663-676.

Appendix A

Teacher Questionnaire on Student Motivation to Read (Initial)

Teacher Name: _____ Student Name: _____

Grade: _____ Date: _____

Directions: For each item, circle the choice that best describes the frequency with which the student displays the behavior. Use these descriptions to guide your choices:

Evaluation Responses: N.A. (0) Rarely (1) Seldom (2) Sometimes (3) Often (4)

N.A.: Not applicable; no opportunity to observe.

Rarely: You have observed the student exhibit this behavior only once, twice, or never.

Seldom: You have observed the student exhibit this behavior several times over a two-month period.

Sometimes: The student exhibits this behavior once or twice a week.

Often: The student exhibits this behavior nearly every day for substantial amounts of time.

		N.A.	Rarely	Seldom	Sometimes	Often
For example:	Chooses to go to the library	0	1	2	(3)	4

Meaning: He/she **Sometimes** chooses to go to the library.

	N.A.	Rarely	Seldom	Sometimes	Often
1. Is a voracious reader	0	1	2	3	4
2. Has a short attention span when reading	0	1	2	3	4

	N.A.	Rarely	Seldom	Sometimes	Often
3. Gets engrossed in reading to find a main idea or grasp a concept	0	1	2	3	4
4. Sharply focused while reading	0	1	2	3	4
5. Has a book nearby and reads it whenever time permits	0	1	2	3	4
6. Easily distracted while reading	0	1	2	3	4
7. Have to tell him/her to get a book to read	0	1	2	3	4
8. Gets so totally absorbed while reading that he/she doesn't sense someone approaching	0	1	2	3	4
9. Easily discouraged when he/she encounters difficult text	0	1	2	3	4
10. Attention is easily diverted while reading	0	1	2	3	4
11. Walks around with his/her nose in a book and reads at every opportunity	0	1	2	3	4
12. Eager to learn strategies to help him/herself understand a topic or story in a book	0	1	2	3	4
13. Persists in overcoming difficult text	0	1	2	3	4
14. Reads continuously for 25 minutes or more	0	1	2	3	4
15. Chooses short books with easy words	0	1	2	3	4
16. Finds out how to understand difficult text by rereading, asking questions, etc.	0	1	2	3	4
17. Unable to dialogue with peers about characters and themes in a book	0	1	2	3	4
18. Introduces ideas from prior reading into classroom discussions	0	1	2	3	4

	N.A.	Rarely	Seldom	Sometimes	Often
19. Becomes a critic on books he/she has read	0	1	2	3	4
20. Inserts him/herself into the story	0	1	2	3	4
21. Doesn't make connections between books —characters, themes, settings	0	1	2	3	4
22. When reading, passes over contradictions that if resolved, would aid his/her understanding	0	1	2	3	4
23. Identifies with characters in a book or story	0	1	2	3	4
24. Talks about his/her feelings related to a book or story	0	1	2	3	4
25. Discussion with teacher and peers is complex —including motivations, plot, and personal response	0	1	2	3	4
26. Chooses to read better quality literature such as Caldicott and Newberry award winners	0	1	2	3	4
27. Shows imagination and creativity when telling stories	0	1	2	3	4
28. Asks questions to make connections while reading	0	1	2	3	4
29. Characters in a story remain strangers to this student such that he/she is unable to put him/herself in their place	0	1	2	3	4
30. Displays emotion while reading, such as smiling or giggling	0	1	2	3	4
31. Shows excitement about what he/she reads as evidenced in discussions with teacher and peers	0	1	2	3	4

	N.A.	Rarely	Seldom	Sometimes	Often
32. Exhibits a relaxed, sometimes unusual physical position while reading	0	1	2	3	4
33. Displays body language in response to what he/she is reading	0	1	2	3	4
34. When writing, takes characters' stance, and compares characters' actions to what he/she would do in their place	0	1	2	3	4
35. Shares his/her journal with peers who show similar interest	0	1	2	3	4
36. Wants to write about what he/she reads	0	1	2	3	4
37. Displays little imagination in his/her writing	0	1	2	3	4
38. Includes details from reading in his/her writing	0	1	2	3	4
39. Journal writing is incomplete or superficial	0	1	2	3	4
40. Writes personal responses in journal regularly and often	0	1	2	3	4
41. Avoids reading as an independent activity	0	1	2	3	4
42. Enjoys browsing in the school or classroom library	0	1	2	3	4
43. Knows how to choose a book he/she would want to read	0	1	2	3	4
44. Hates going to the school library	0	1	2	3	4
45. Unable to pick out books he/she has read if presented with a book list	0	1	2	3	4

	N.A.	Rarely	Seldom	Sometimes	Often
46. Asks for Sustained Silent Reading time	0	1	2	3	4
47. Does not compete with peers for high grades in reading	0	1	2	3	4
48. Locates books on current topics	0	1	2	3	4
49. Chooses books on a particular topic repeatedly	0	1	2	3	4
50. Chooses to read books or stories by particular authors who write about certain types of characters	0	1	2	3	4
51. Shares good books with classmates and/or friends	0	1	2	3	4
52. Chooses to read books by his/her favorite author(s)	0	1	2	3	4
53. Discusses favorite authors with teacher or other adults in the school	0	1	2	3	4
54. Chooses books by the same authors or the same topics that are discussed in class	0	1	2	3	4
55. Undeveloped sense of what he/she likes in a book	0	1	2	3	4
56. Getting on the school honor roll isn't important to him/her	0	1	2	3	4
57. Works very hard to get into and stay in a top reading group	0	1	2	3	4
58. Asks to go to the library to get books on topics from class	0	1	2	3	4
59. Reads books in a series by the same author	0	1	2	3	4

	N.A.	Rarely	Seldom	Sometimes	Often
60. Displays competitiveness for high grades in other school subjects	0	1	2	3	4
61. Discusses favorite authors with peers	0	1	2	3	4
62. "Hides" in books	0	1	2	3	4

Appendix B

Teacher Questionnaire on Student Motivation to Read (Revised)

Teacher Name: _____ Student Name: _____

Grade: _____ Date: _____

Directions: For each item, circle the choice that best describes the frequency with which the student displays the behavior. Use these descriptions to guide your choices:

Evaluation Responses: N.A. (0) Rarely (1) Seldom (2) Sometimes (3) Often (4)

N.A.: Not applicable; no opportunity to observe.

Rarely: You have observed the student exhibit this behavior only once, twice, or never.

Seldom: You have observed the student exhibit this behavior several times over a two month period.

Sometimes: The student exhibits this behavior once or twice a week.

Often: The student exhibits this behavior nearly every day for substantial amounts of time.

		N.A.	Rarely	Seldom	Sometimes	Often
For example:	Chooses to go to the library	0	1	2	(3)	4

Meaning: He/she **Sometimes** chooses to go to the library.

	N.A.	Rarely	Seldom	Sometimes	Often
1. Is a voracious reader	0	1	2	3	4
2. Sharply focused while reading	0	1	2	3	4

	N.A.	Rarely	Seldom	Sometimes	Often
3. Has a book nearby and reads it whenever time permits	0	1	2	3	4
4. Easily distracted while reading	0	1	2	3	4
5. Have to tell him/her to get a book to read	0	1	2	3	4
6. Gets so totally absorbed while reading that he/she doesn't sense someone approaching	0	1	2	3	4
7. Easily discouraged when he/she encounters difficult text	0	1	2	3	4
8. Finds out how to understand difficult text by rereading, asking questions, etc.	0	1	2	3	4
9. Talks about his/her feelings related to a book or story	0	1	2	3	4
10. Discussion with teacher and peers is complex—including motivations, plot, and personal response	0	1	2	3	4
11. Wants to write about what he/she reads	0	1	2	3	4
12. Journal writing is incomplete or superficial	0	1	2	3	4
13. Writes personal responses in journal regularly and often	0	1	2	3	4
14. Knows how to choose a book he/she would want to read	0	1	2	3	4
15. "Hides" in books	0	1	2	3	4

Appendix C

Response Choices (%): Teacher Questionnaire (Initial) on Student Motivation to Read

Items	NA	Rarely	Seldom	Sometimes	Often
1. Is a voracious reader	12.5	14.6	22.9	35.4	14.6
2. Has a short attention span	4.2	12.5	39.6	14.6	29.2
3. Gets engrossed in reading to find a main idea or grasp a concept	0.0	10.4	14.6	52.1	22.9
4. Sharply focused while reading	0.0	8.3	18.8	37.5	35.4
5. Has a book nearby and reads it whenever time permits	8.3	14.6	27.1	27.1	22.9
6. Easily distracted while reading	4.2	12.5	39.6	16.7	27.1
7. Have to tell him/her to get a book to read	10.4	2.1	43.8	18.8	25.0
8. Gets so totally absorbed while reading that he/she doesn't sense someone approaching	8.3	27.1	12.5	35.4	16.7
9. Easily discouraged when he/she encounters difficult text	10.4	16.7	27.1	22.9	22.9
10. Attention is easily diverted while reading	4.3	10.6	46.8	17.0	21.3
11. Walks around with his\her nose in a book and reads at every opportunity	12.5	50.0	16.7	14.6	6.3
12. Eager to learn strategies to help him/herself understand a topic or story in a book	6.3	6.3	16.7	47.9	22.9
13. Persists in overcoming difficult text	8.3	10.4	18.8	39.6	22.9
14. Reads continuously for 25 minutes or more	20.8	18.8	18.8	25.0	16.7
15. Chooses short books with easy words	17.0	6.4	27.7	17.0	31.9

Items	NA	Rarely	Seldom	Sometimes	Often
16. Finds out how to understand difficult text by rereading, asking questions, etc.	6.3	6.3	18.8	56.3	12.5
17. Unable to dialog with peers about characters and themes in a book	14.6	4.2	18.8	16.7	45.8
18. Introduces ideas from prior reading into classroom discussions	2.1	8.3	18.8	50.0	20.8
19. Becomes a critic on books he/she has read	29.2	6.3	14.6	31.3	18.8
20. Inserts him/herself into the story	20.8	8.3	20.8	39.6	10.4
21. Doesn't make connections between books—characters, themes, settings	14.6	2.1	22.9	29.2	31.3
22. When reading, passes over contradictions that if resolved, would aid his/her understanding	29.2	2.1	39.6	16.7	12.5
23. Identifies with characters in a book or story	16.7	6.3	12.5	45.8	18.8
24. Talks about his/her feelings related to a book or story	0.0	16.7	18.8	37.5	27.1
25. Discussion with teacher and peers is complex—including motivations, plot, and personal response	18.8	16.7	16.7	33.3	14.6
26. Chooses to read better quality literature such as Caldicott and Newberry award winners	33.3	12.5	22.9	27.1	4.2
27. Shows imagination and creativity when telling stories	8.3	8.3	12.5	52.1	18.8
28. Asks questions to make connections while reading	2.1	6.3	25.0	52.1	14.6
29. Characters in a story remain strangers to this student such that he/she is unable to put him/herself in their place	29.2	2.1	18.8	27.1	22.9
30. Displays emotion while reading, such as smiling or giggling	31.3	6.3	22.9	31.3	8.3

Items	NA	Rarely	Seldom	Sometimes	Often
31. Shows excitement about what he/she reads as evidenced in discussions with teacher and peers	2.1	4.2	29.9	45.8	18.8
32. Exhibits a relaxed, sometimes unusual physical position while reading	35.4	18.8	6.3	31.3	8.3
33. Displays body language in response to what he/she is reading	50.0	6.3	14.6	25.0	4.2
34. When writing, takes characters' stance, and compares characters' actions to what he/she would do in their place	25.0	12.5	22.9	31.3	8.3
35. Shares his/her journal with peers who show similar interests	18.8	6.3	27.1	35.4	12.5
36. Wants to write about what he/she reads	6.3	10.4	29.2	33.3	18.8
37. Displays little imagination in his/her writing	4.2	6.3	33.3	27.1	29.2
38. Includes details from reading in his/her writing	2.1	4.2	18.8	50.0	25.0
39. Journal writing is incomplete or superficial	14.6	6.3	27.1	18.8	33.3
40. Writes personal responses in journal regularly and often	10.4	2.1	14.6	54.2	18.8
41. Avoids reading as an independent activity	10.4	4.2	31.3	18.8	35.4
42. Enjoys browsing in the school or classroom library	8.3	0.0	8.3	52.1	31.3
43. Knows how to choose a book he/she would want to read	12.5	4.2	33.3	45.8	4.2
44. Hates going to the school library	25.0	0.0	2.1	12.5	60.4
45. Unable to pick out books he/she has read if presented with a book list	54.2	2.1	8.3	2.1	33.3
46. Asks for sustained silent reading time	47.9	20.8	18.8	8.3	4.2
47. Does not compete with peers for high grades in reading	25.0	6.3	20.8	14.6	33.3

BEST COPY AVAILABLE

Items	NA	Rarely	Seldom	Sometimes	Often
48. Locates books on current topics	29.2	8.3	8.3	22.9	31.3
49. Chooses books on a particular topic	35.4	6.3	4.2	33.3	20.8
50. Chooses to read books or stories by particular authors who write about certain types	58.3	2.1	8.3	20.8	10.4
51. Shares good books with classmates and/or friends	35.4	4.2	12.5	39.6	8.3
52. Chooses to read books by his/her favorite author(s)	60.4	2.1	6.3	16.7	14.6
53. Discusses favorite authors with teacher or other adults in the school	64.6	18.8	2.1	12.5	2.1
54. Chooses books by the same authors or the same topics that are discussed in class	43.8	6.3	4.2	41.7	4.2
55. Undeveloped sense of what he/she likes in a book	33.3	0.0	16.7	20.8	29.2
56. Getting on the school honor roll isn't important to him/her	27.1	4.2	16.7	6.3	45.8
57. Works very hard to get into and stay in a top reading group	33.3	2.1	25.0	12.5	27.1
58. Asks to go to the library to get books on topics from class	41.7	18.8	8.3	29.2	2.1
59. Reads books in a series by the same author	62.5	6.3	6.3	18.8	6.3
60. Displays competitiveness for high grades in other school subjects	25.0	8.3	18.8	22.9	25.0
61. Discusses favorite authors with peers	54.2	20.8	10.4	14.6	0.0
62. "Hides" in books	16.7	33.3	14.6	25.0	10.4

NRRC National
Reading Research
Center

318 Aderhold, University of Georgia, Athens, Georgia 30602-7125
3216 J. M. Patterson Building, University of Maryland, College Park, MD 20742